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II. REMARKS

Formal Matters

Claims 1, 2, and 5-39 are pending after entry of the amendments set forth herein.

Claims 1-4 were examined and were rejected. Claims 5-29 were withdrawn from consideration.

Claims 1 and 2 are amended. The amendments to the claims were made solely in the interest of expediting prosecution, and are not to be construed as acquiescence to any objection or rejection of any claim. Support for the amendments to claims 1 and 2 is found in the claims as originally filed, and throughout the specification, in particular at the following exemplary locations: claim 1: page 7, lines 16-21; page 7, lines 22-26; page 8, lines 4-9; and page 8, line 21 to page 9, line 2; and claim 2: page 7, lines 16-21; page 8, lines 4-9; and page 8, line 21 to page 9, line 2. Accordingly, no new matter is added by these amendments.

Claims 3 and 4 are canceled without prejudice to renewal, without intent to acquiesce to any rejection, and without intent to surrender any subject matter encompassed by the canceled claims.

Applicants expressly reserve the right to pursue any canceled subject matter in one or more continuation and/or divisional applications.

Claims 30-39 are added. Support for new claims 30-39 is found in the claims as originally filed, and throughout the specification, including the following exemplary locations: claims 30 and 31: page 7, lines 16-21; page 8, lines 4-9; and page 8, line 21 to page 9, line 2; claims 32 and 38: page 7, lines 3-15; claims 33 and 39: page 7, lines 14-15; claims 34-36: page 11, lines 18-27; and page 12, lines 11-24; and claim 37: page 11, lines 18-27. Accordingly, no new matter is added by these new claims.

Applicants respectfully request reconsideration of the application in view of the remarks made herein.

Rejection under 35 U.S.C. §112, second paragraph

Claims 3 and 4 were rejected under 35 U.S.C.§112, second paragraph.

Claims 3 and 4 are canceled without prejudice to renewal, thereby rendering this rejection of claims 3 and 4 moot.

Rejection under 35 U.S.C.§112, first paragraph

Claims 1-4 were rejected under 35 U.S.C.§112, first paragraph, as allegedly failing to comply with the written description requirement.

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Claims 3 and 4 are canceled without prejudice to renewal, thereby rendering this rejection of claims 3 and 4 moot.

Claims 1 and 2 are amended to recite a glycosyl sulfotransferase (GST) polypeptide present in other than its natural environment, wherein the GST polypeptide comprises an amino acid sequence having at least about 75% (claim 1) or at least about 85% (claim 2) amino acid sequence identity to the amino acid sequence set forth in SEQ ID NO:8.

SEQ ID NO:8 is an amino acid sequence of a human GST designated GST-4α. Specification, page 4, lines 26-29; page 7, lines 16-17; and Figure 1. The instant specification provides amino acid sequences of a second human GST, designated GST-4β, where an exemplary amino acid sequence is set forth in SEQ ID NO:13. Specification, page 5, lines 9-12; page 8, lines 4-9; and Figure 4B. The instant specification also provides amino acid sequences of a mouse GST designated GST-4, where an exemplary amino acid sequence is set forth in SEQ ID NO:7. Specification, page 5, lines 1-4; page 7, lines 22-26; and Figure 2. The amino acid sequences set forth in SEQ ID NO:8 and SEQ ID NO:13 share about 85% amino acid sequence identity. The amino acid sequences set forth in SEQ ID NO:8 and SEQ ID NO:8 amino acid sequence identity.

In view of the description provided in the instant specification, those skilled in the art would recognize that Applicants were in possession of a GST polypeptide present in other than its natural environment, wherein the GST polypeptide comprises an amino acid sequence having at least about 75%. Accordingly, claims 1 and 2 comply with the written description requirement of 35 U.S.C.§112, first paragraph.

Applicants submit that the rejection of claims 1-4 under 35 U.S.C. §112, first paragraph, has been adequately addressed in view of the remarks set forth above. The Examiner is thus respectfully requested to withdraw the rejection.

Rejections under 35 U.S.C.§102(e)

Claims 1-4 were rejected under 35 U.S.C.§102(e) as allegedly anticipated by Bistrup et al. (U.S. Patent No. 6,365,365; "Bistrup"). Claims 1-4 were rejected under 35 U.S.C.§102(e) as allegedly anticipated by Tang et al. (U.S. Patent No. 6,558,935; "Tang").

Claims 3 and 4 are canceled without prejudice to renewal, thereby rendering this rejection of claims 3 and 4 moot.

Claims 1-4 over Bistrup

The Office Action stated that Bistrup teaches a human GST-3. The Office Action stated that the

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GST-3 of Bistrup has 49.1% identity to SEQ ID NO:8 of the instant application. Applicants respectfully traverse the rejection.

As discussed above, claims 1 and 2 are amended to recite a glycosyl sulfotransferase (GST) polypeptide present in other than its natural environment, wherein the GST polypeptide comprises an amino acid sequence having at least about 75% (claim 1) or at least about 85% (claim 2) amino acid sequence identity to the amino acid sequence set forth in SEQ ID NO:8. Bistrup does not disclose a GST polypeptide having at least about 75% amino acid sequence identity to the amino acid sequence set forth in SEQ ID NO:8. Accordingly, Bistrup cannot anticipate the instant invention as claimed.

Claims 1-4 over Tang

The Office Action stated that Tang teaches a mouse GST, SEQ ID NO:11. The Office Action stated that SEQ ID NO:11 of Tang has 48.0% identity to SEQ ID NO:7 of the instant application. Applicants respectfully traverse the rejection.

As discussed above, claims 1 and 2 are amended to recite a glycosyl sulfotransferase (GST) polypeptide present in other than its natural environment, wherein the GST polypeptide comprises an amino acid sequence having at least about 75% (claim 1) or at least about 85% (claim 2) amino acid sequence identity to the amino acid sequence set forth in SEQ ID NO:8. SEQ ID NO:11 of Tang and SEQ ID NO:7 of the instant application share only about 56% amino acid sequence identity. SEQ ID NO:11 of Tang and SEQ ID NO:8 of the instant application share only about 52% amino acid sequence identity. Tang does not disclose a GST polypeptide having at least about 75% amino acid sequence identity to the amino acid sequence set forth in SEQ ID NO:8. Accordingly, Tang cannot anticipate the instant invention as claimed.

Conclusion as to the rejections under 35 U.S.C.§102(e)

Applicants submit that the rejection of claims 1-4 under 35 U.S.C. §102(e) has been adequately addressed in view of the remarks set forth above. The Examiner is thus respectfully requested to withdraw the rejection.

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III. CONCLUSION

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-0815, order number UCAL-138 DIV.

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Date: Nec. 1, 2005

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